

1 transmitting signals from said origination stations, said signals including at least
2 one generation instruction and at least one signal for comparison;
3 said plurality of intermediate transmission stations receiving said signals,
4 detecting said generation instruction, each said intermediate transmission station
5 passing said generation instruction and said signal for comparison to its automatic
6 control unit, each intermediate transmission station generating a signal in accordance
7 with said generation instruction and transferring its generated signal to its transmitter
8 based on one or more comparisons performed by its automatic control unit; and
9 said plurality of intermediate transmission stations generating and transmitting
10 different signals.

11 4. A method of communicating signals in a communications network, said
12 communications network including one or more origination stations and a plurality of
13 intermediate transmission stations, each said intermediate transmission station having a
14 receiver, at least one signal generator operatively connected to said receiver for
15 generating and transferring a signal to a transmitter, an automatic control unit
16 operatively connected to said signal generator, and a detector operatively connected to
17 said signal generator, comprising the steps of:
18 (1) receiving a signal at a transmission station;
19 (2) generating at least one generation instruction and at least one signal for
20 comparison to effect each of said plurality of intermediate transmission stations to
21 generate a generated signal in accordance with said generation instruction and transfer
22 said generated signal to said transmitter of each of said plurality of intermediate

1 transmission stations based on one or more comparisons performed by said automatic
2 control unit of said intermediate transmission station; and
3 (3) transmitting said at least one generation instruction.

4 5. A method of communicating signals in a communications network, said
5 communications network including one or more origination stations and a plurality of
6 intermediate transmission stations, each said intermediate transmission station having a
7 receiver, at least one signal generator operatively connected to said receiver for
8 generating and transferring a signal to a transmitter, an automatic control unit
9 operatively connected to said signal generator, and a detector operatively connected to
10 said signal generator, comprising the steps of:

11 (1) receiving a signal to be transmitted;
12 (2) receiving an instruct signal which is effective to:
13 (a) effect a transmitter station to generate at least one generation
14 instruction and at least one signal for comparison to effect each of said plurality of
15 intermediate transmission stations to generate a generated signal in accordance with
16 said generation instruction and transfer said generated signal to said transmitter of each
17 of said plurality of intermediate transmission stations based on one or more
18 comparisons performed by said automatic control unit of said intermediate
19 transmission station; or

20 (b) effect a receiver station to generate at least one generation
21 instruction and at least one signal for comparison to effect each of said plurality of
22 intermediate transmission stations to generate a generated signal in accordance with
23 said generation instruction and transfer said generated signal to said transmitter of each

1 of said plurality of intermediate transmission stations based on one or more
2 comparisons performed by said automatic control unit of said intermediate
3 transmission station;

4 (3) receiving a transmitter control signal which operates at said transmitter
5 station to communicate said at least one generation instruction and said at least one
6 signal for comparison to a transmitter station transmitter; and

7 (4) transmitting said signal, said instruct signal and said transmitter control
8 signal.

9 6. A method of communicating signals in a communications network, said
10 communications network including one or more origination stations and a plurality of
11 intermediate transmission stations, each said intermediate transmission station having a
12 receiver, at least one signal generator operatively connected to said receiver for
13 generating and transferring a signal to a transmitter, an automatic control unit
14 operatively connected to said signal generator, and a detector operatively connected to
15 said automatic control unit for detecting one or more instructions, said method
16 comprising the steps of:

17 transmitting instructions from said origination stations, said instructions
18 including a at least one generation control signal;

19 transmitting data for processing from said origination stations;

20 said plurality of intermediate transmission stations receiving said instructions,
21 detecting said generation control signal and receiving said data for processing, each
22 said intermediate transmission station passing at least one of (1) said generation control
23 signal and (2) said data for processing to its automatic control unit, each intermediate

1 transmission station storing data for processing and generating a signal based on stored
2 data processed in accordance with said generation control signal; and
3 said plurality of intermediate transmission stations generating and transmitting
4 different signals.

5 7. A method of communicating signals in a communications network, said
6 communications network including one or more origination stations and a plurality of
7 intermediate transmission stations, each said intermediate transmission station having a
8 receiver, at least one signal generator operatively connected to said receiver for
9 generating and transferring a signal to a transmitter, an automatic control unit
10 operatively connected to said signal generator, a detector operatively connected to said
11 automatic control unit for detecting one or more instructions, and each automatic
12 control unit being programmed to perform in a station specific fashion, comprising the
13 steps of:

- 14 (1) receiving a signal at a transmission station;
15 (2) generating at least one generation control signal to effect each of said
16 intermediate transmission stations to generate a generated signal based on stored data
17 processed in accordance with said generation control signal; and
18 (3) transmitting said at least one generation control signal.

19 8. A method of communicating signals in a communications network, said
20 communications network including one or more origination stations and a plurality of
21 intermediate transmission stations, each said intermediate transmission station having a
22 receiver, at least one signal generator operatively connected to said receiver for

1 generating and transferring a signal to a transmitter, an automatic control unit
2 operatively connected to said signal generator, a detector operatively connected to said
3 automatic control unit for detecting one or more instructions, and each automatic
4 control unit being programmed to perform in a station specific fashion, comprising the
5 steps of:

6 (1) receiving a signal to be transmitted;
7 (2) receiving an instruct signal which is effective to:
8 (a) effect a transmitter station to generate at least one generation
9 control signal which is effective to enable at least one of said intermediate transmission
10 stations to generate a generated signal based on stored data processed in accordance
11 with said generation control signal; or
12 (b) effect a receiver station to generate at least one generation control
13 signal which is effective to enable at least one of said intermediate transmission stations
14 to generate a generated signal based on stored data processed in accordance with said
15 generation control signal;
16 (3) receiving a transmitter control signal which operates at said transmitter
17 station to communicate said at least one generation control signal to a transmitter
18 station transmitter; and
19 (4) transmitting said signal, said instruct signal and said transmitter control
20 signal.